Property Tax Fairness

From the Center for Municipal Finance

Nationwide Study | Local Reports | Related Research | Understanding Regressivity

Understanding Regressivity

Property taxes are, in principle, meant to be proportional to the value of the property. Regardless of the value of a property, all homes should be assessed the same *proportion* of their value. If a county assesses homes at 50% of their sale price, it shouldn't matter whether that home sells for $100 or $100,000, they should both be assessed at 50%.

How is a typical property assessed?

One obstacle that all assessors face: this process assumes that a property's value is well known; in fact, this is seldom the case. For a property that has sold recently, the sale price is usually a reasonable approximation of its market value. But only a small number of properties are sold in any given year—about 5% of all homes. For the remaining 95% of homes, the value must somehow be estimated. This is the job of local assessors:

1. The local assessor's office compiles a list of all of recently-sold properties and identifies important characteristics of each property such as square footage, the number of bedrooms, the size of the yard, the age of the property, etc.
2. The assessor's office uses a statistical model to estimate the relationship between each property's relevant characteristics and its' expected sale price, using data from the sample of recently sold properties. For instance, each additional square foot of building space adds X dollars to the sale price, an additional bathroom adds a certain amount of value, and so on.
3. This model is used to estimate the values of all similarly situated homes that haven't sold, based on the property's features. That is, the assessor assumes that the relationship between property features and prices for the sold properties would have been the same for the unsold properties. For example, if, among properties that sold, the average price for a 2,000 square foot, 3-bedroom home was $100,000, the assessor assumes that other 2,000 square foot, 3-bedroom homes that weren't sold are worth $100,000. In principle, these comparisons should be limited to homes within the same neighborhood, since the price of similar homes can vary significantly across locations, particularly in larger communities.
4. The assessed value from this process becomes the basis on which property taxes are levied.

What is property tax regressivity?

Inaccurate assessments can result in property taxes that are disproportionate to a property's actual value. If a property's assessed value is greater than its actual value, the property owner will be over-taxed; while a property whose assessed value is less than its actual value will result in the property owner being under-taxed.

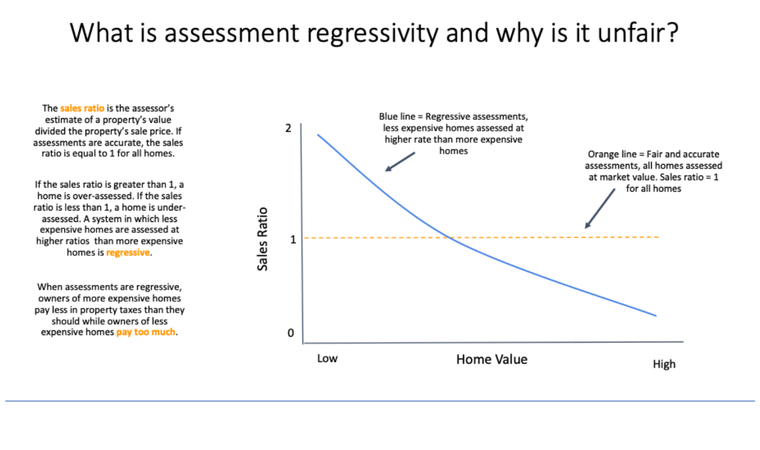
While no assessment system is perfectly accurate, one type of inaccuracy is particularly concerning: regressivity. *Assessments are regressive when low-value homes are assessed at a higher percentage of their true market value than are high-value homes.* A common way of diagnosing regressivity is to compare the sales ratio for homes with different sale prices. A property's sales ratio provides a comparison between a property's assessed value and the same property's sale price.

Why does regressivity matter?

When assessment are conducted accurately, the resulting property taxes are indeed proportional to a property's actual value. However, when property assessment is inaccurate, the resulting property taxes will also be inaccurate.

Because no assessor can ever inspect every single home in a city, no assessment system will ever be perfect. There will always be information which the assessor simply doesn't know. When assessments are conducted equitably, though, residents can at least be confident that they are all being treated the same, even if the system is flawed. For example, if the average sales ratio for all homes is the same, residents can be confident that the system is not biased with respect to price, meaning that owners of both more and less expensive property will pay their fair share of taxes on average.

The graph below shows what the average sales ratio should look like in a properly functioning assessment system, as well as what can go wrong when assessments are regressive. If assessments were perfectly accurate, every home would be valued at exactly 100% of its value, meaning that the sales ratio would be 1 for every property, as depicted by the dashed orange line. However, when the average sales ratio is higher for low-priced homes than for high-priced homes, as depicted by the solid blue line, assessments are regressive.


What is assessment regressivity and why is it unfair?
The sales ratio is the assessor's estimate of a property's value divided the property's sale price. If assessments are accurate, the sales ratio is equal to 1 for all homes.
If the sales ratio is greater than 1, a home is over-assessed. If the sales ratio is less than 1, a home is under-assessed. A system in which less expensive homes are assessed at higher ratios than more expensive homes is regressive.
When assessments are regressive, owners of more expensive homes pay less in property taxes than they should while owners of less expensive homes pay too much.
Blue line = Regressive assessments, less expensive homes assessed at higher rate than more expensive homes
Orange line = Fair and accurate assessments, all homes assessed at market value. Sales ratio = 1 for all homes
Sales Ratio
2
1
0
Low
Home Value
High

Regressive assessments lead to regressive taxation, in which owners of low-value property pay too much in taxes while owners of high-value properties pay too little. A regressive tax system can shift the collective tax burden from high-value property owners to lower-value property owners, putting a strain on the city's most financially-vulnerable residents.

What does regressivity look like in the real world?

Suppose the average home that sold for $100,000 is actually assessed at $120,000. Meanwhile, the average home that sold for $1 million is assessed at $800,000. Suppose, by law, all properties should pay 1% of their assessed value in property taxes each year. In this scenario, the $100,000 home pays $1200 in taxes, for an effective tax rate of 1.2%. The $1 million home pays $8000 in taxes, for an effective tax rate 0.8%. The result is that the low-priced home has a 50% higher tax rate than the high-priced home (1.2/0.8 = 1.5).

© University of Chicago - All Rights Reserved - **Accessibility**

This Website is intended for educational and informational purposes only. This and any related web pages provide general information only, and do not contain any specific legal or financial advice. Always consult a competent attorney, accountant, or other professional regarding any legal or financial matters.